

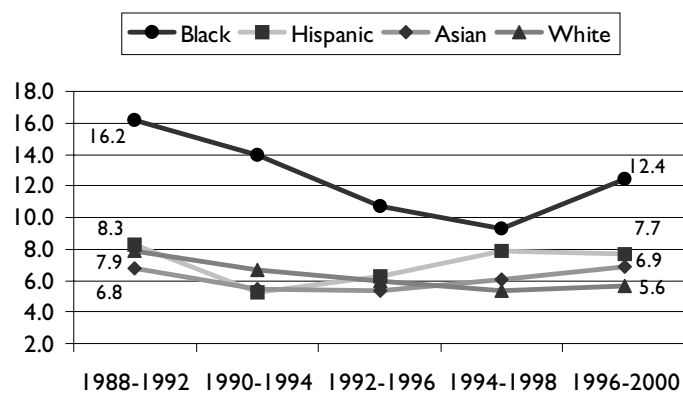
Issue Brief

**HEALTHY MOTHERS, HEALTHY INFANTS:
REDUCING RACIAL AND ETHNIC DISPARITIES**

The health of women of childbearing age and their infants is an important measure of community well-being and a predictor of the health of the next generation.¹ Rhode Island has made significant strides in maternal and infant health care during the last decade. The expansion of public health insurance through RItE Care has narrowed the gap between publicly and privately insured patients in a number of maternal and infant health areas. In some areas, such as the percentage of women receiving adequate prenatal care and the portion of the population with health insurance coverage, Rhode Island is a leader in the country.^{2,3}

Despite progress, there are continuing disparities in health care utilization and health outcomes among different racial/ethnic groups and across communities.⁴ Additional community-based efforts and state policy action are needed if we are to ensure adequate health access and outcomes for all mothers and infants, regardless of race, ethnicity, residence, or income.

Infant Mortality Rates by Race/Ethnicity, Rhode Island, 1988-2000



- During the 1990s, Rhode Island's infant mortality rate declined for White and Black infants, but remained level for Hispanic and Asian infants.
- Despite progress over the past decade, the Black infant mortality rate remains twice the rate for White infants and higher than that of any other racial and ethnic group.

Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, five-year averages of data from 1988-1992, 1990-1994, 1992-1996, 1994-1998 and 1996-2000. Data for 1996-2000 are provisional.



NATIONAL DISPARITIES IN MATERNAL AND INFANT HEALTH

According to a recent study by the National Academy of Sciences, racial and ethnic minorities are more likely to receive lower quality health care in the U.S., even when insurance, income, age, and severity of conditions are comparable.⁵



PERSISTENT RACIAL AND ETHNIC DISPARITIES

On virtually every indicator of maternal and child health access or outcomes, there are significant national differences between minorities and Whites. Disparities continue in rates of insurance; adequacy of prenatal care; incidence of low birth weight, hospitalization and infant mortality; teen pregnancy and birth rates; and rates of breastfeeding.^{6,7,8,9} The elimination of such disparities is among the goals of *Healthy People 2010*, a federal health agenda with objectives that have been adopted by Rhode Island.¹⁰



THE INTERSECTING CAUSES OF RACIAL AND ETHNIC DISPARITY

The causes of disparity are multiple and interrelated. They include **socioeconomic factors** such as poverty, poor housing, lack of insurance and reduced access to providers; **behavioral factors**, such as maternal smoking or drug use; **cultural factors**, such as presence or absence of extended family supports; **physiological risk factors**, such as maternal weight, nutrition, or hypertension; and **system/provider bias or lack of cultural competence**, including language barriers, disrespect by providers and outright discrimination.^{11,12,13}

“Cultural competence is...a set of values, behaviors, attitudes, and practices within a system, organization, program or among individuals...which enables them to work together cross-culturally. It refers to the ability to honor and respect beliefs, language, interpersonal styles and behaviors of individuals and families receiving services, as well as staff who are providing such services.”

Source: *Cultural Competence and Sudden Infant Death: A Review of the Literature from 1990 to 2000* (November 2001). Washington, DC: National Center for Cultural Competence, Georgetown University.

ADDRESSING RACIAL AND ETHNIC DISPARITIES IN HEALTH CARE

Based on its findings of inequity and bias in health care, the National Academy of Sciences recommended the following:

- Increase the numbers of minority health professionals and provide cross-cultural training.
- Reduce disparities between public and private insurance plans.
- Ensure consistency of care through evidence-based guidelines.
- Encourage availability of language interpretation and community health workers.
- Improve patient education and empowerment.
- Structure payment systems to ensure an adequate supply of services to minorities.

Source: *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (2002). Washington, DC: National Academy Press, Institute of Medicine.

MATERNAL AND INFANT HEALTH IN RHODE ISLAND: ACHIEVEMENTS AND DISPARITIES

INSURANCE AND ACCESS: THE IMPACT OF RITE CARE

In 1994, RItE Care (Rhode Island's Medicaid managed care program) greatly extended Medicaid eligibility. Currently, pregnant women and children up to age 19 with family income up to 250% of the poverty level can qualify, along with parents of eligible children up to 185% of poverty. As a result, Rhode Island has the lowest rate of uninsured children in the country — 5% compared to 14% nationally.¹⁴ However, rates of uninsured children remain higher in Pawtucket (10%), Providence (7%), and Central Falls (7%), where there are high concentrations of minority children.¹⁵

RITE CARE AND ACCESS TO PROVIDERS¹⁶

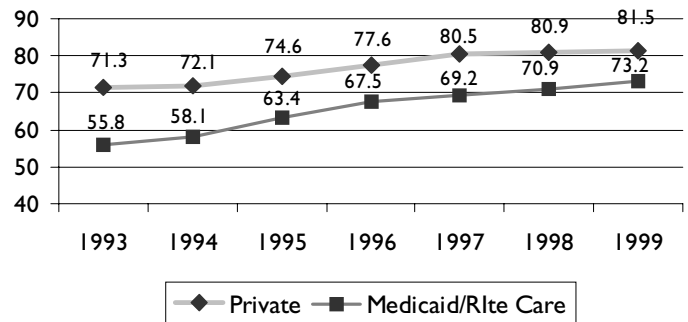
RItE Care implementation included measures that addressed delivery system barriers by:

- Increasing provider reimbursement rates.
- Requiring providers who accept private pay patients through a health plan participating in RItE Care to also accept RItE Care patients.
- Requiring that health plans provide outreach, free pregnancy testing, and early prenatal visits.
- Providing transportation and interpreter services.

As a result:

- Participation in Medicaid by primary care physicians increased.
- The number of annual physician visits by Medicaid participants increased.
- Hospital and emergency room visits declined.

Women Receiving Adequate* Prenatal Care by Insurance Status, Rhode Island, 1993-1999



n = 87,600

*“Adequate” means that prenatal care began by the 4th month of pregnancy and at least 80% of recommended visits were received.

- Rhode Island's implementation of RItE Care improved adequacy of prenatal care for enrollees and narrowed the gap between adequacy of care received by those participating in private and public insurance. These changes particularly benefit pregnant women who are non-White, unmarried, under age 18 and have low educational attainment (since they are overrepresented in the Medicaid population).¹⁷
- Among RItE Care members, 25% of emergency room visits for women ages 15-44 are due to conditions related to pregnancy (compared with less than 5% nationally for women of that age group). Preliminary analysis suggests that patients who receive care at certain hospital clinics have higher emergency room utilization rates than patients routinely treated by private physicians or at health centers.¹⁸

Source: Griffin, J. (1999 Update). *The Impact of RItE Care on Adequacy of Prenatal Care and the Health of Newborns*. MCH Evaluation Inc.

PRE-CONCEPTION INTERVENTION: THE WOMEN'S HEALTH SCREENING AND REFERRAL PROGRAM

RItE Care has improved health care for pregnant women and infants in Rhode Island. However, many health risks are best addressed before conception. Women who are poor, uninsured and likely to become pregnant often have difficulty accessing pregnancy prevention services and health services that would reduce risks in the event of a pregnancy.¹⁹

The Women's Health Screening and Referral Program (WHSRP) is a program of the Rhode Island Department of Health. Its goals include preventing unintended pregnancies, improving pregnancy outcomes through risk identification and referral, identifying service gaps, and creating a continuum of care for all women of childbearing age. The program functions at ten Title X family planning clinics located in high-poverty communities with large percentages of minorities.

UNPLANNED PREGNANCIES

It is estimated that between one-third and one-half of all pregnancies in Rhode Island are unintended, and rates for teens may exceed 90%.²⁰

WHSRP provides free pregnancy tests, administers a voluntary risk assessment survey, and provides education and referral services such as family planning, smoking cessation, home visiting, domestic violence assistance, nutrition services and medical care.²¹

About half of women with a negative pregnancy test will return with a positive pregnancy test within a year.²² **Women with negative pregnancy test results but with one or more risk factors present a particular opportunity for both prevention of unplanned pregnancies and for health improvement/risk reduction prior to pregnancy.**

INCIDENCE OF SELECTED RISKS AMONG WOMEN WITH NEGATIVE PREGNANCY TEST RESULTS, SPRING 2001 (WHSRP)

BEHAVIORAL RISKS	%
Are not taking folic acid	84%
Smoke or are around others who smoke	64%
Are using alcohol and/or drugs	22%
Have concerns about nutrition or their diet	21%
Are depressed or have other mental health problems	16%
MEDICAL RISKS	%
Do not know or are not immune to rubella	48%
Have personal medical problems	16%
Had previous pregnancy complications	10%
Have birth defects or mental retardation in family	11%
SOCIO-ECONOMIC RISKS	%
Have no one at home to rely on for help with a pregnancy	15%
Have transportation and/or child care problems	11%

n = 6,606

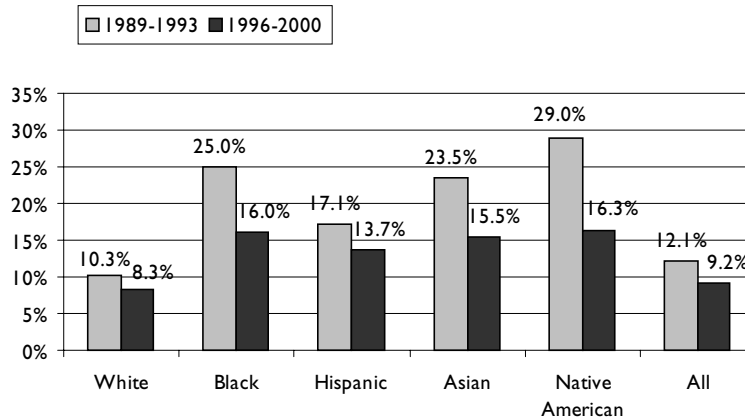
Source: Rhode Island Department of Health, Women's Health Screening and Referral Program, Care Questionnaires, Spring 2001.

- Other risks include HIV, domestic violence, and lack of food, phone access or utilities.
- Folic acid can reduce the incidence of certain birth defects which develop during the first few weeks of pregnancy. In Rhode Island folic acid use is lowest among women ages 25-34 and Black women.²³
- A woman's nutrition during pre-conception and pregnancy is important for birth outcomes. In Rhode Island in 2000, among households in poverty areas, elevated rates of food insecurity were found to exist among 41% of Hispanic households compared with 21% of non-Hispanic households.²⁴



PRENATAL HEALTH

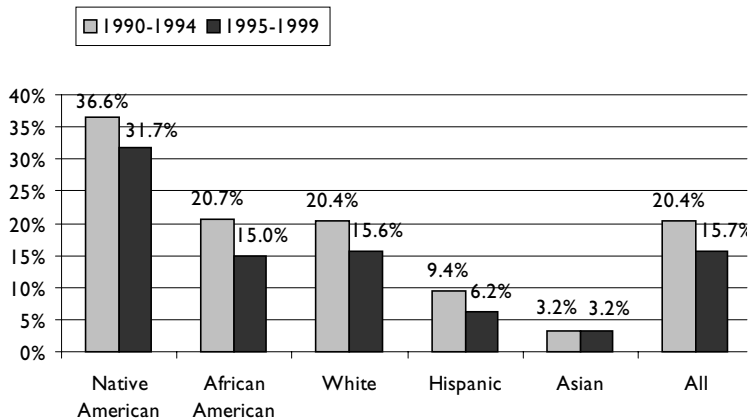
Women With Delayed Prenatal Care by Race/Ethnicity, Rhode Island, 1989-1993 and 1996-2000



Source: RI Department of Health, Division of Family Health, Maternal and Child Health Database, 1989-1993 and 1996-2000.

- During the 1990s, the rate of delayed prenatal care declined sharply in Rhode Island among all racial and ethnic groups. However, White women remain almost twice as likely to receive early prenatal care as minority women.
- Rates of delayed prenatal care remain higher in the five core cities of Providence, Pawtucket, Woonsocket, Newport, and Central Falls. Central Falls has the highest rate (20%), more than twice that of Rhode Island as a whole.

Smoking During Pregnancy by Race/Ethnicity, Rhode Island, 1990-1994 and 1995-1999



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1990-1999.

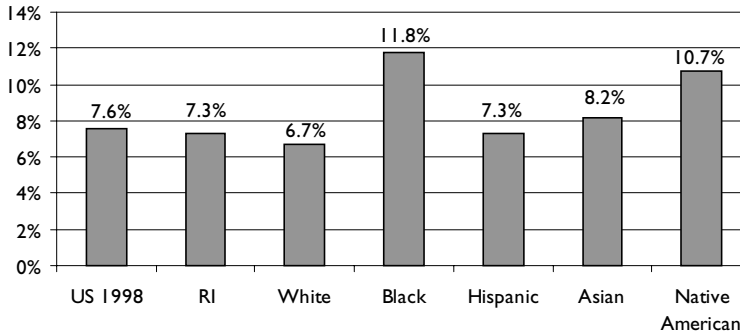
- Tobacco use during pregnancy is associated with low birth weight and premature birth.
- During the 1990s, tobacco use during pregnancy declined among all racial/ethnic groups except Asians, for whom it did not change.
- Teen mothers ages 15-19 reduced their rates of smoking during pregnancy from 26% to 23% between 1990 and 1999, but remain the age group with the highest smoking rates.



INFANT HEALTH AND DEVELOPMENT

While overall infant mortality declined in Rhode Island during the last decade, racial and ethnic disparities remain. Low birthweight increased during the 1990s. Moreover, the physical and emotional development of many infants remains threatened by multiple and varied risk factors such as domestic violence, substance abuse and maternal depression.²⁵

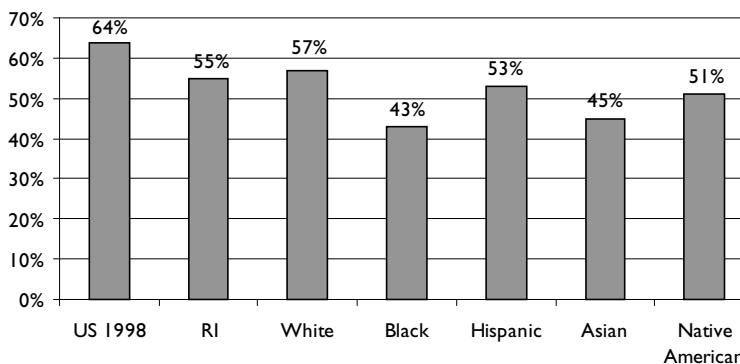
Low Birthweight Infants by Race/Ethnicity, Rhode Island, 1996-2000



Source: Rhode Island Department of Health, Division of Family Health, Maternal and Child Health Database, 1996-2000. Data for 1997-2000 are provisional. U.S. Data from *Kids Count Data Book: State Profiles of Child Well-Being 2001* (2001). Baltimore, MD: The Annie E. Casey Foundation.

- Native American and Black women have the highest rates of low birthweight.
- With the exception of Newport, rates of low birthweight infants are higher in the core cities than statewide, with the highest rates in Providence (8.9%).
- Low birthweight (less than 5.5 lbs) *increased* in Rhode Island from 6.1% in 1988-1992 to 7.3% of births in 1996-2000.
- Multiple births represent an increasing proportion of low birthweight infants. In 1989 multiple births represented 16% of low birthweight infants; in 1999 multiple births represented 27% of all low birthweight infants.

Breastfeeding Rates by Race/Ethnicity, Rhode Island, 1996-2000



Source: Rhode Island Department of Health, Newborn Developmental Risk Assessment Screening, 1996-2000; *HHS Blueprint for Action on Breastfeeding* (2000). Washington, DC: U.S. Department of Health and Human Services, Office on Women's Health.

- Breastfeeding is a primary factor in achieving optimal infant health and development.²⁶ Breastfeeding rates are lower for minorities in Rhode Island, and are lower in core cities (with the exception of Newport) than in Rhode Island overall.
- Black women in the United States and in Rhode Island have the lowest breastfeeding rates.²⁷
- Breastfeeding can be encouraged through paid maternity leave, on-site child care, and opportunities during the day to nurse or express milk.^{28,29,30}



INFANTS IN THE MOST VULNERABLE FAMILIES



MENTAL HEALTH, SUBSTANCE ABUSE AND DOMESTIC VIOLENCE

The profound effects of maternal depression and other forms of mental illness on infant and child development are well-documented. Providers who serve low-income populations in Rhode Island report that maternal mental health needs may go undiagnosed and untreated. Post-traumatic stress disorder is particularly common among refugees who escaped violence in their home country, yet there is frequently a lack of available services, especially if language is a barrier.³⁴ Domestic violence is also linked to depression, child abuse and neglect as well as to delays in infant development.³⁵ Women are more likely to be victims of domestic violence during pregnancy than at any other time in their lives.^{36,37}

Substance abuse also affects birth outcomes and infant development. Criminalization of maternal substance abuse overlooks both the nature of addiction as a disease and the potential for improved outcomes if the focus shifted to providing treatment and social service supports for both the mother and the infant.^{38,39}

Ensuring the physical health and emotional development of the most vulnerable infants in Rhode Island requires that health providers understand the nature and impact of mental health, substance abuse and domestic violence on infants, that opportunities for identification and referral in these areas are maximized, and that capacity is increased to ensure access to culturally competent treatment and support services.

UNIVERSAL NEWBORN RISK SCREENING PROGRAM

Screening

The Universal Newborn Risk Screening Program measures newborn risk factors. Risks range from physical factors such as low birth weight, prolonged intensive care hospitalization and developmental disabilities, to socioeconomic factors such as maternal age, education, single status, and poverty. Rates of newborn risk for minorities and in the five core cities are significantly higher than the Rhode Island average.³¹

Home Visiting

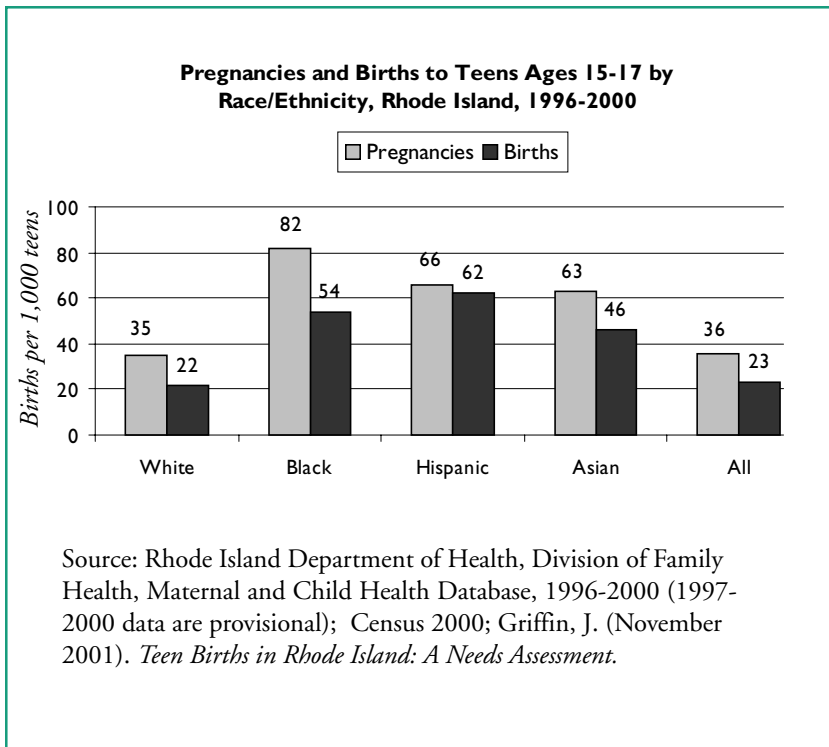
At-risk babies are offered home visits through the Rhode Island Department of Health's Family Outreach Program which contracts with visiting nurse organizations. In 1999, 57% of at-risk infants in Rhode Island received a home visit.³² Home visits offer an opportunity to further screen the broader category of at-risk infants, to identify specific needs, provide parenting education, promote breastfeeding, and to connect families to a medical home and to early childhood or other services. Referrals may include Early Intervention, lead screening, WIC (Women, Infants and Children nutrition program), child care, RIte Care, and Early Head Start.³³



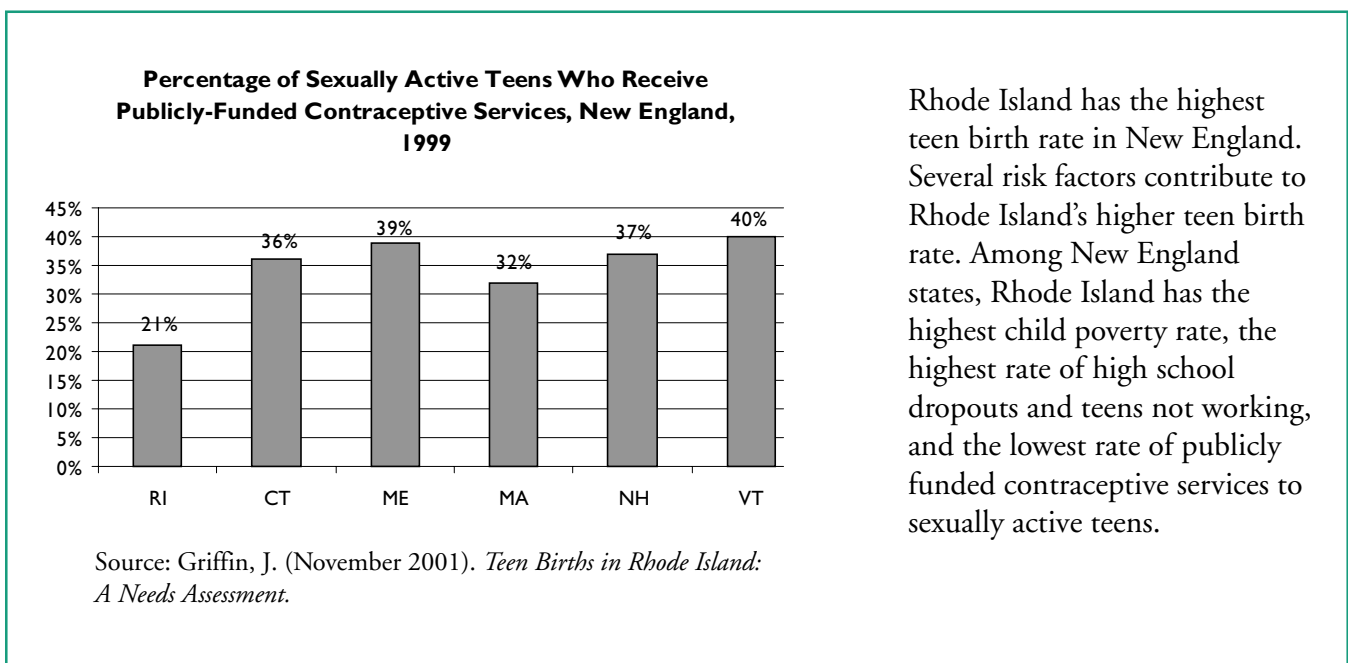
TEEN PREGNANCY AND TEEN BIRTHS

Nationally, teens are less likely to receive adequate prenatal care. Babies born to young mothers are more likely to be low birthweight and to be hospitalized than are those born to older mothers. Only one-third of teen mothers receive a high school diploma.⁴⁰ Teen

births for girls ages 15-17 in Rhode Island have declined by 22% over the past decade. Nonetheless, one in ten births in Rhode Island is to a teen and teen birth rates are higher in Rhode Island than in other New England states.⁴¹



- Most of the differences between teen pregnancy rates and teen birth rates are due to induced abortions. The abortion rate varies from a low of 4 per 1,000 for Hispanic teens to a high of 27 per 1,000 for Black teens.
- Between 1996 and 2000 in Rhode Island, 21% of births to teens were to a teen who was already a mother. Teens as young as 15 and 16 had repeat births.
- Over half of all teens ages 15-19 who became pregnant between 1996 and 2000 lived in the five core cities.



Rhode Island has the highest teen birth rate in New England. Several risk factors contribute to Rhode Island's higher teen birth rate. Among New England states, Rhode Island has the highest child poverty rate, the highest rate of high school dropouts and teens not working, and the lowest rate of publicly funded contraceptive services to sexually active teens.



CAUSES OF DISPARITY IN RHODE ISLAND

As is true nationally, the causes of racial and ethnic disparities in Rhode Island are multiple and interrelated. They include socioeconomic status and related access barriers, cultural/behavioral factors, pre-existing physical conditions, provider or system biases and lack of cultural/linguistic competence. Demographic conditions specific to Rhode Island that impact on the disparity in health access and outcomes include the following:

- During the 1990s, the poverty rate in Rhode Island increased from 14% to 17%.⁴² Poverty is closely related to race/ethnicity, single parenthood and maternal age and education. Poverty is one of the strongest predictors of maternal and infant health as well as long-term child outcomes.^{43,44}
- Rhode Island’s housing costs are high, and exacerbate the stresses and isolation of poverty by consuming a disproportionate share of income, contributing to unsafe housing and housing instability and concentrating low-income families in low-income neighborhoods.⁴⁵
- The ethnic/racial and linguistic diversity of Rhode Island’s population has increased over the last decade. Minority populations are increasingly concentrated in core urban areas associated with decreased opportunities and negative maternal and infant health outcomes.^{46,47}
- The Hispanic population of Rhode Island experienced the largest growth during the 1990s. Nationally, Hispanics are the ethnic group least likely to be insured.⁴⁸
- Teens in Rhode Island are far less likely to receive publicly funded contraceptive services than in other New England states, with correspondingly higher teen birth rates in Rhode Island. Rhode Island children have higher rates of poverty than elsewhere in New England and Rhode Island teens have higher rates of dropping out of school and not working.⁴⁹

BARRIERS AND STRATEGIES: LESSONS FROM PARENTS AS PARTNERS COMMUNITY PILOTS

Rhode Island Department of Health pilot projects in Central Falls and Woonsocket assessed parents’ perception of maternal and child health services in underserved communities and identified as barriers:

- Lack of knowledge about program services and eligibility.
- Lack of transportation and child care.
- Lack of evening and weekend hours essential for working families.
- Rude or disrespectful frontline staff.
- Stigma of using publicly funded programs.
- Lack of trust, including fear of intervention by the Department of Children, Youth and Families.
- Concern among Latino families that use of services may negatively affect immigration status.
- Lack of cultural competence by providers, including lack of staff who speak the family’s language and understand its culture.

Lessons included the importance of provider training and bicultural staff, the effectiveness of parent-to-parent outreach and education, and the public health model of agency partnership with community parents and providers to assess needs and ensure quality and accessibility of services.

Source: Rhode Island Department of Health (2000), *State Systems Development Initiative Interim Final Report, FY 1997-1999*.



BUILDING ON ACCOMPLISHMENTS IN MATERNAL AND INFANT HEALTH IN RHODE ISLAND

Rhode Island has made significant progress in several areas of maternal and infant care, most notably in access to insurance and early prenatal care. Nonetheless, significant disparities remain. Addressing them will require strategies and investments which focus on the foundations of economic security for all families, the growing diversity of Rhode Island and the needs of underserved communities.

Focus on High-Poverty Communities. Infant mortality rates (IMR) are an important indicator of community well-being. Communities with multiple problems such as poverty, poor housing conditions, and unemployment tend to have higher infant mortality rates than more advantaged communities. Three of the five core cities with high child poverty rates have infant mortality rates that exceed the state rate of 6.2 infant deaths per 1,000 live births: Providence (IMR of 9.8), Pawtucket (IMR of 8.4) and Central Falls (IMR of 7.7). In addition, these communities have higher rates of uninsured children, higher rates of delayed access to prenatal care, higher rates of low birthweight infants, and higher teen birth rates than the state as a whole. Government and civic leaders, community agencies, and families can work together to ensure that young women of childbearing age, infants, and children have access to primary health care services, family planning, support services, and affordable housing.

Sustain and Expand Investments in Income Supports for Low-Income Families. Sustained investments in income support programs for low-income families helps to avoid many of the negative outcomes associated with poverty. Community leaders can work to ensure that even the most high risk families in their communities have access to health insurance (RIte Care), child care, and cash assistance – including expanded access to adult education and training. There continues to be a need for affordable housing in communities across the state. Building on Rhode Island’s leadership in these critical policy areas is essential if we are to make progress toward eliminating disparities in maternal and infant health.

Focus on Family Support and Infant Development. Poverty, isolation, lack of a support network, and other risk factors place many women and infants at risk for poor health and developmental outcomes. For some families, the added problems of domestic violence, substance abuse, and maternal depression compromise child development with long-term consequences. Targeted resources are needed to link the most at-risk pregnant women and new parents to comprehensive programs that can work with them intensively and over time. Promising strategies include the expansion of the existing capacity of programs such as Early Head Start which promotes healthy prenatal outcomes for pregnant women, enhances the development of infants and young children, and promotes healthy family functioning. Home visiting programs can be expanded and linked with child development services, quality child care, and Early Intervention services. Consideration should also be given to enhancing paid family leave and workplace flexibility, either through state policies or employer incentives, so as to improve opportunity for bonding, breastfeeding, and optimal physical and emotional development of infants.

Focus on Access and Cultural Competence. The continuing racial and ethnic disparities in maternal and infant health outcomes indicate the need for investments that increase access for families diverse in culture and language. Specifically, additional resources should be targeted to programs that: 1) improve the cultural and linguistic competence of the service delivery system; 2) enlist community residents in service delivery for women and infants in order to ensure that services address real barriers and needs; 3) enhance outreach to link isolated families to existing services; and 4) increase service capacity in areas such as mental health and substance abuse treatment for women.

Focus on Teens. The health of women before they get pregnant is closely linked to subsequent maternal and infant health outcomes. Ensuring that teens have access to high quality health care throughout adolescence and reducing the pregnancy rates among teens are two measures that hold real potential for reducing racial and ethnic disparities in health outcomes. In Rhode Island, teens have high rates of sexually transmitted diseases and unplanned pregnancies. The teen birth rate in Rhode Island, while on a downward trend, is higher than the rest of the New England states. Yet access to publicly funded contraceptive services is the lowest of the New England states. More than one in five births to Rhode Island teens is to a teen who is already a mother. Promising strategies to prevent teen pregnancy and improve health outcomes for teens include: expanding the capacity of prevention programs, including primary health care services designed to meet the special needs of teens of diverse racial, ethnic and cultural backgrounds; sustaining and expanding school-based health centers; increasing access to prevention and family planning services; implementing community-wide preventive health education targeted to teens; and investing in programs for adolescent parents that support the healthy development of both the teen and their child.



ACKNOWLEDGMENTS

For assistance with this issue brief we thank: Candy Powell, Andrea Ferreira, Robin Rodgers, RI Healthy Mothers, Healthy Babies Coalition; William Hollinshead, MD, Vania Brown-Small, Samara Viner-Brown, Becky Bessette, Janice Cataldo, Deborah Garneau, Janna Hesser, Cheryl LeClair, Bill McQuade, Mia Patriarca, Charles White, RI Department of Health; Tricia Leddy, Jane Griffin, Denise Hines, RI Department of Human Services; Rosalind Vaz, MD, RI Hospital; Ellen Gurney, MD, Providence Community Health Centers; Kerrie Jones Clark, Deborah Silvia, Rhode Island Health Center Association; Barry Lester, Vulnerable Infants Program of RI, Noreen Mattis, Project Link, Women and Infants' Hospital.

RESOURCES

Rhode Island Healthy Mothers, Healthy Babies Coalition
Candy Powell and Bonnie Braga, Co-Chairs (2001-2002)
 401-682-2100, x-623
www.hmbbri.org

March of Dimes Birth Defects Foundation, Rhode Island Chapter
Betsy Akin, State Director
 401-454-1911
www.modimes.org

Early Head Start National Resource Center @ Zero to Three
www.ehsnrc.org

Center for Hispanic Policy and Advocacy
Luisa Murillo, Executive Director
 401-467-0111

Progreso Latino
Dania Keisling, Executive Director
 401-728-5920

Urban League of Rhode Island
Dennis Langley, Executive Director
 401-351-5000

Southeast-Asian Economic Development Center
Joseph Le, Executive Director
 401-941-8422

Rhode Island Department of Health Division of Family Health
William H. Hollinshead, MD, Medical Director
 401-222-4655

Office of Minority Health
Vania Brown-Small, Minority Health Coordinator
 401-222-2901

Rhode Island Department of Human Services, Center for Child and Family Health (RIte Care)
Tricia Leddy, Administrator
 401-462-2127

Rhode Island Health Center Association
Kerrie Jones Clark, Executive Director
 401-274-1771

Covering Kids Rhode Island
Dorothy Stamper, Project Director
 401-351-9400

REFERENCES

- ¹*Healthy People 2010* (January 2000). Washington, DC: U.S. Department of Health and Human Services.
- ²Wertheimer, R., et al. (2001). *The Right Start for America's Newborns: A Decade of City and State Trends (1990-1999)*. Baltimore, MD: The Annie E. Casey Foundation.
- ^{3,14}U.S. Census Bureau, CPS, 1999-2001 average. Compiled by the Annie E. Casey Foundation.
- ^{4,43}RI Department of Health, Office of Family Health, 1996-2000.
- ^{5,12}*Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (2002). Washington, DC: National Academy Press, Institute of Medicine.
- ⁶Scott Collins, K., et al. (March 2002). *Diverse Communities, Common Concerns: Assessing Health Care Quality for Minority Americans*. The Commonwealth Fund.
- ^{7,13}*A Synthesis of the Literature: Racial and Ethnic Disparities in Access to Medical Care* (October 1999). Menlo Park, CA; prepared by Morehouse Medical Treatment Effectiveness Center for The Henry J. Kaiser Family Foundation.
- ⁸Keppel, K., et al. (2002) "Trends in Racial and Ethnic-Specific Rates for the Health Status Indicators: United States, 1990-1998" in *Statistical Note* No. 23.
- ⁹Dennis, C. (2002). "Breastfeeding Initiation and Duration: A 1990-2000 Literature Review" in *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, Jan./Feb. 2002, Vol. 31, No. 1.
- ¹⁰*Healthy Rhode Islanders 2000 Progress Review* (March 2001). Rhode Island Department of Health.
- ¹¹*Racial and Ethnic Disparities in Infant Mortality* (September 2000). Washington, DC: U.S. Department of Health and Human Services, Workgroup on Infant Mortality.
- ¹⁵RI Department of Human Services Medicaid Data Archive and RI Department of Health, Behavioral Risk Surveillance System, 1996 and 1998 average and 1999-2000 average.
- ^{16,17}Griffin, J., et al. (April 1999). "The Effect of a Medicaid Managed Care Program on the Adequacy of Prenatal Care Utilization in Rhode Island" in *American Journal of Public Health*, Vol 89, No. 4.
- ^{18^a}*Utilization of Services Provided in Emergency Departments*" in *RIte Stats*, Vol. 1, No.3, Jan. 2002.
- ^{19,20,21,22}Hollinshead, W., et al. (May 2000). "Assessing and Responding to Pre/Periconception Risks – Early Experience with the Rhode Island Women's Health Screening & Referral Program" in *Medicine and Health*, Vol. 83, No. 5.
- ²³RI Department of Health, *Behavioral Risk Factor Survey, 1997*
- ²⁴RI Department of Health, *Division of Family Health, RI Food Security Survey 2000*.
- ^{25,35}Knitzer, J. (2000). *Promoting Resilience*. New York, NY: National Center for Children in Poverty.
- ^{26,27,28}*HHS Blueprint for Action on Breastfeeding* (2000). Washington, DC: U.S. Department of Health and Human Services.
- ²⁹*Advancing Women's Health: Health Plans' Innovative Program in Breastfeeding Promotion* (July 2001). Washington, DC: U.S. Department of Health and Human Services and American Association of Health Plans.
- ³⁰Idemoto, S. (2000) *Family Leave Insurance: A proposal for Washington Workers*, Seattle, WA: Economic Opportunity Institute.
- ^{31,32}RI Department of Health, *Division of Family Health Newborn Developmental Risk Screening Program, 1996-2000*.
- ³³*Family Outreach Program Fact Sheet, 2001*.
- ³⁴Rhode Island KIDS COUNT interviews with family practitioners (2002).
- ³⁶Reed, A. (1999). "Women's Healthcare Disparities and Discrimination" in *Civil Rights Journal*, Fall 1999.
- ³⁷*Race/Ethnicity, Gender, Socioeconomic Status-Research Exploring Their Effects on Child Health: A Subject Review (Policy Statement)* (June 2000). American Academy of Pediatrics.
- ³⁸Women & Infants' Project Link, Fact Sheet.
- ³⁹Women & Infants' Vulnerable Infants Program of Rhode Island, Fact Sheet.
- ⁴⁰*Trends and Statistics on Teen Pregnancy, Births, and Sexual Activity* (2000). Child Welfare League of America.
- ^{41,49}Griffin, J. (November 2001). *Teen Births in Rhode Island: A Needs Assessment*.
- ^{42,47}*Children at Risk: State Trends 1990-2000*. Baltimore, MD: The Annie E. Casey Foundation.
- ⁴⁴*America's Children: Key Indicators of Well Being* (2001). Washington, DC: U.S. Federal Interagency Forum on Child and Family Statistics.
- ⁴⁵Hirsch, E. (2001). *Rhode Island's Housing Crisis*. Providence, RI: Providence College.
- ⁴⁶U.S. Census Bureau, Census 2000.
- ⁴⁸*Racial and Ethnic Disparities in Access to Health Insurance and Health Care* (April 2000). Los Angeles, CA: UCLA Center for Health Policy Research and The Henry J. Kaiser Family Foundation.

Rhode Island KIDS COUNT is a children's policy organization that provides information on child well-being, stimulates dialogue on children's issues, and promotes accountability and action. Primary funding for Rhode Island KIDS COUNT is provided by The Rhode Island Foundation and The Annie E. Casey Foundation. Additional funding is provided by Prince Charitable Trusts, The Robert Wood Johnson Foundation, the David and Lucile Packard Foundation, the Ford Foundation, the Ewing Marion Kauffman Foundation, CVS/pharmacy and other corporate, foundation and individual sponsors.

Rhode Island KIDS COUNT Staff

Elizabeth Burke Bryant,

Executive Director

Catherine Boisvert Walsh,

Deputy Director

Wilsa Galarza,

Administrative Assistant

Olinda Matos, Program Associate

Dorene Bloomer, Finance Director

Laura Beavers, Research Analyst

Veronika Kot, Policy Analyst

Dorothy Stamper,

Covering Kids Project Director

Sonia Rodrigues,

Pawtucket Covering Kids Coordinator

Theresa Hancock, Policy Associate

Royce Conner, Policy Associate

Raymonde Charles, Program Assistant

Rhode Island KIDS COUNT

One Union Station

Providence, RI 02903

401-351-9400

401-351-1758 (fax)

email: rikids@rikidscount.org

www.rikidscount.org



CVS/pharmacy®

Production of the Rhode Island Kids Count Issue Brief Series is made possible through the generous support of CVS/pharmacy.